

**Abstract**

The disclosed embodiments relate to exploiting circuitry that exists in a typical Orthogonal Frequency Division Multiplexing (OFDM) receiver to find the phase of a complex number corresponding to an input signal without implementing additional costly circuitry or employing a relatively slow inverse tangent look-up table. The magnitude of the complex number is normalized (106) and processed (108, 110) through a closed loop to produce an output (112) proportional to the phase of the complex number.